STIC Search Report
EIC 1700

USPTO

9011

STIC Database Tracking Number: 144934

TO: Anthony Green **Location: REM 9C15** **Art Unit : 1755** **February 23, 2005** **Case Serial Number: 10/721402**	**From: Usha Shrestha** **Location: EIC 1700** **REMSEN 4B28** **Phone: 571/272-3519** **usha.shrestha@uspto.gov**

Search Notes

Search and Information Resources Administration

STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact***:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1713*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

144934

Mellerson, Kendra

From: Green, Anthony (AU1755)
Sent: Thursday, February 10, 2005 6:41 PM
To: STIC-EIC1700
Subject: Structure search 10/721,402

Please do a structure search for claim 1 of this application. Thanks

Anthony Green
Primary Patent Examiner
AU 1755
REMSEN 9C-15
571-272-1367

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 12:37:56 ON 23 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

=> d his

     FILE 'LREGISTRY' ENTERED AT 09:37:41 ON 23 FEB 2005
L1             STR

     FILE 'REGISTRY' ENTERED AT 09:43:22 ON 23 FEB 2005
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L3               STR L1
L4            50 S L3
L5          4396 S L4 FUL

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L7               STR L3
L8               STR L6
L9               STR L7

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L11             0 S L9 SAM  SUB=L5
L12            16 S (L8 OR L9) FUL  SUB=L5

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L13              STR L3

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L15         1548 S L13 FUL  SUB=L5
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                 SAV L15 GRE721A/A
                 SAV TEMP L5 GRE721B/A

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L16             5 S L12
L17          3618 S L15
L18             4 S L16 AND L17

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=> d que l18
L3               STR
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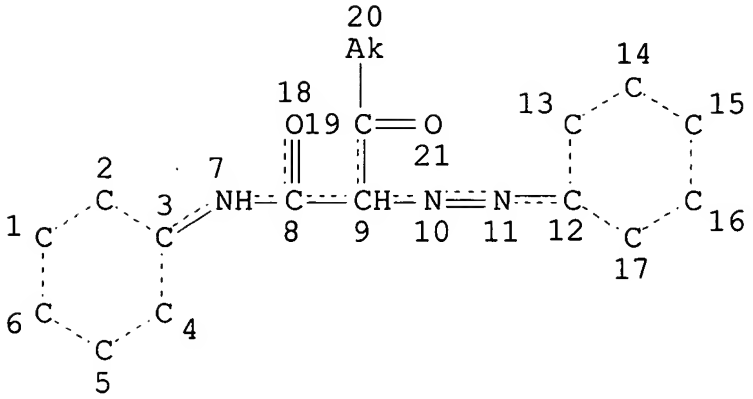

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE
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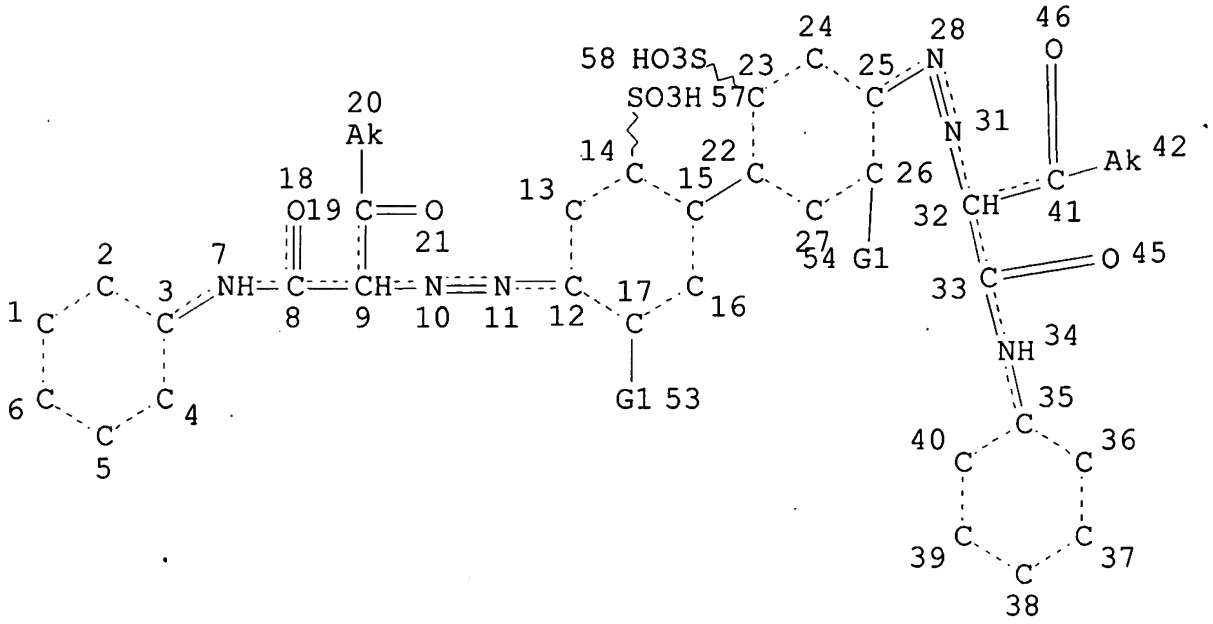

Ak~O
@55 56

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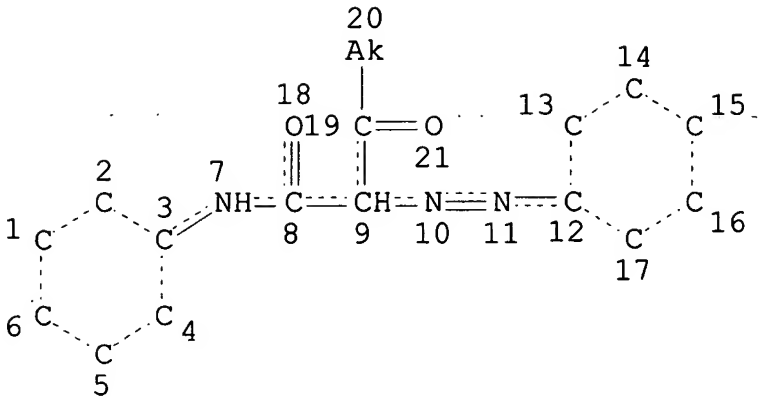

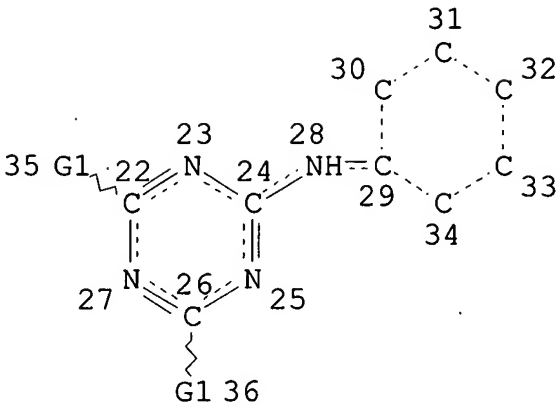

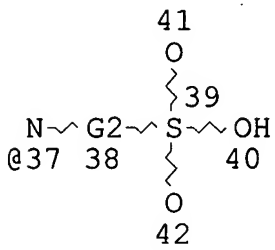

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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
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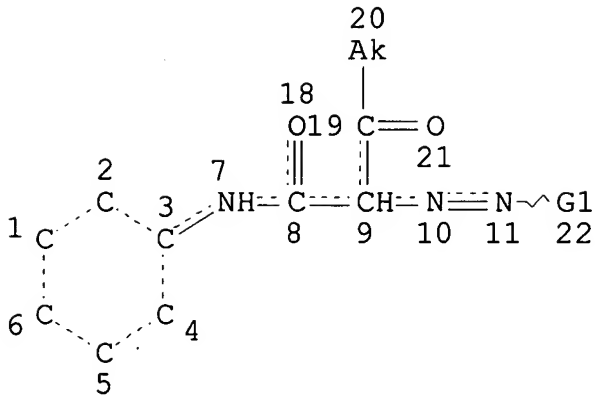

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE
L15 1548 SEA FILE=REGISTRY SUB=L5 SSS FUL L13
L16 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L17 3618 SEA FILE=HCAPLUS ABB=ON PLU=ON L15
L18 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND L17

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FILE 'HCAPLUS' ENTERED AT 12:38:23 ON 23 FEB 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

=> d l18 1-4 ibib abs hitstr hitind

L18 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:446936 HCAPLUS
DOCUMENT NUMBER: 141:8600
TITLE: Yellow pigment composition for image recording

and process for producing the same
INVENTOR(S): Takahara, Koichi; Sato, Junichiro; Misono, Kensuke; Kitamura, Kunji; Tamatome, Hidehiro
PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1424370	A1	20040602	EP 2003-257476	2003 1127
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2003253188	A2	20030910	JP 2002-362517	2002 1213
JP 2004204221	A2	20040722	JP 2003-366182	2003 1027

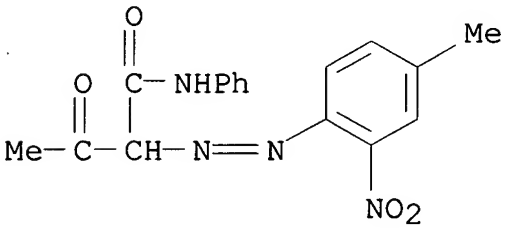
PRIORITY APPLN. INFO.:
JP 2002-344030 A 2002 1127
JP 2002-362517 A 2002 1213
JP 2003-366182 A 2003 1027

OTHER SOURCE(S): MARPAT 141:8600

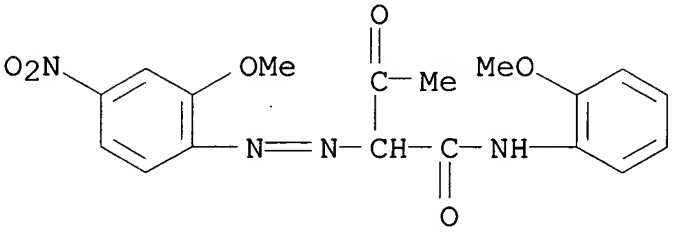
AB Monoazo based yellow pigment compns. for image recording that are suitable as a well-balanced yellow coloring agent for image recording with favorable reproducibility of images and image retaining capacity, which is inexpensive and excellent in safety are provided. The composition includes a monoazo yellow base pigment represented by R1N:NC(COMe)HCONHR2 [R1 =(optionally 2,4-di-substituted) Ph group; R2 = (optionally tri-substituted) Ph group], and a particular disazo yellow pigment having a sulfonic acid group and/or a particular monoazo yellow pigment.

IT **2512-29-0P 6358-31-2P 596806-21-2P**
(coupling reaction in manufacture of yellow pigment composition for image
recording)

RN 2512-29-0 HCAPLUS
CN Butanamide, 2-[(4-methyl-2-nitrophenyl)azo]-3-oxo-N-phenyl- (9CI) (CA INDEX NAME)

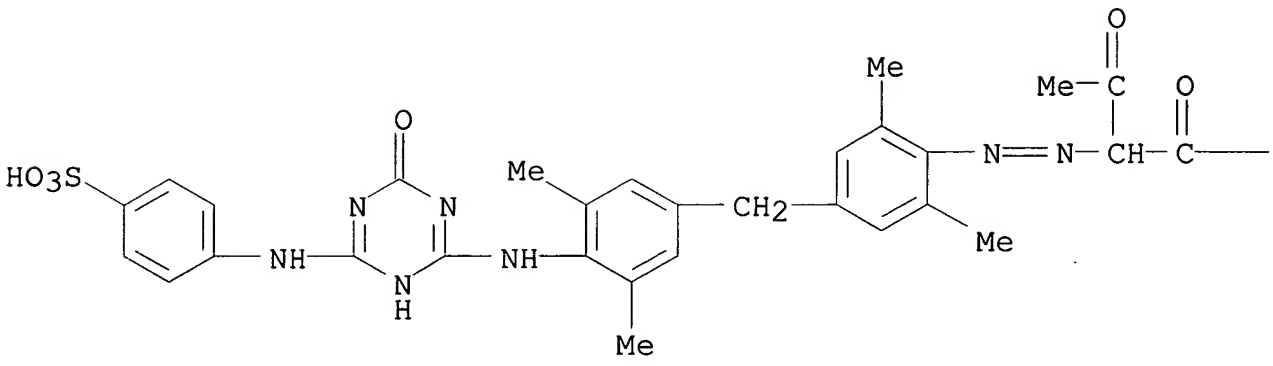


RN 6358-31-2 HCAPLUS
CN Butanamide, 2-[(2-methoxy-4-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)

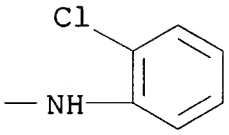


RN 596806-21-2 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[4-[[4-[[1-[[(2-chlorophenyl)amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

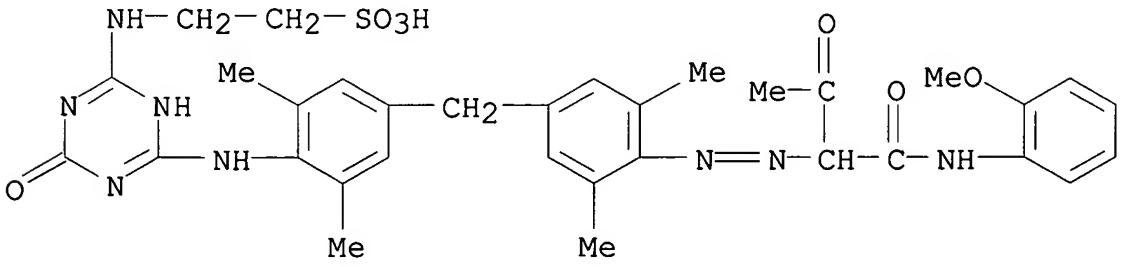
PAGE 1-A



PAGE 1-B

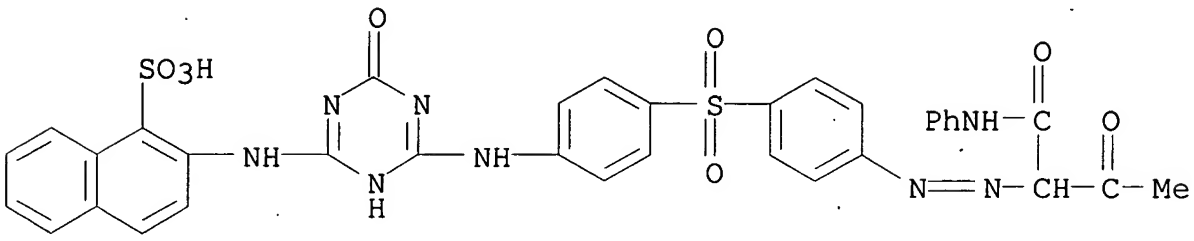


IT **596806-19-8P 596806-20-1P**
(manufacture of yellow pigment composition for color image recording)
RN 596806-19-8 HCAPLUS
CN Ethanesulfonic acid, 2-[[1,4-dihydro-6-[[4-[[4-[[1-[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 596806-20-1 HCAPLUS
CN 1-Naphthalenesulfonic acid, 2-[[1,4-dihydro-4-oxo-6-[[4-[[4-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]phenyl]sulfonyl]phenyl]ami

no]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



IC ICM C09B067-00
CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 42, 74
IT **2512-29-0P 6358-31-2P 596806-21-2P**
697148-75-7P 697148-81-5P 697148-90-6P
(coupling reaction in manufacture of yellow pigment composition for image recording)
IT **596806-19-8P 596806-20-1P**
(manufacture of yellow pigment composition for color image recording)

L18 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:710928 HCAPLUS
DOCUMENT NUMBER: 139:246912
TITLE: Yellow pigment compositions for image recording and preparation method thereof
INVENTOR(S): Takahara, Koichi; Misono, Kensuke; Tamatome, Hidehiro; Sato, Junichiro; Kitamura, Kunji
PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003253188	A2	20030910	JP 2002-362517	2002 1213
JP 2004204221	A2	20040722	JP 2003-366182	2003

1027

US 2004138434 A1 20040715 US 2003-721402
2003
1125

EP 1424370 A1 20040602 EP 2003-257476
2003
1127

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: JP 2002-344030 A
2002
1127

JP 2002-362517 A
2002
1213

JP 2003-366182 A
2003
1027

OTHER SOURCE(S): MARPAT 139:246912

GI

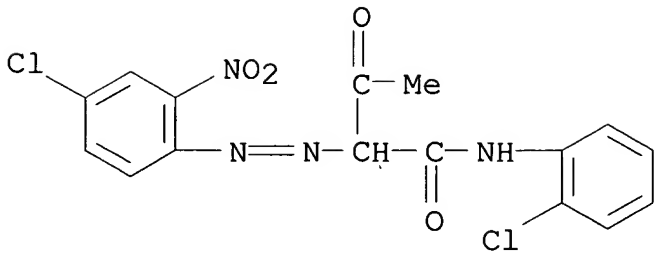
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The pigment compns. for use in ink-jet printing, electrostatic printing, and electrophotog. image recording contain yellow pigments I, II, and III (R1, R2 = H, Cl, NO2, Me, OMe; R3-R5 = H, Cl, NO2, Me, OMe, OEt; R6, R7 = Me, OMe; Q1-Q4 = H, C1-2 lower alkyl, lower alkoxy, OH; Q1-Q4 = H, lower alkyl, alkoxy, OH; W = CH2, O, S, SO2, O-p-C6H4O, CONH, O-m-C6H4O, O-p-C6H4C6H4-p-O, O-p-C6H4SO2C6H4-p-O; A, B = NHYSO3H, OH; Y = ethylene, phenylene, naphthylene; m = 0, 1). Thus, coupling of m-nitro-o-anisidine and IV with acetoacetyl o-anisidide gave a pigment composition having an average pigment diameter of 0.08 μm.

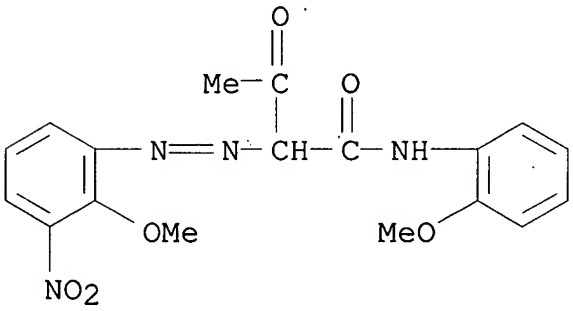
IT **6486-23-3P 150206-17-0P 596806-19-8P 596806-20-1P 596806-21-2P**
(preparation of yellow azo pigment compns. for image recording applications)

RN 6486-23-3 HCAPLUS

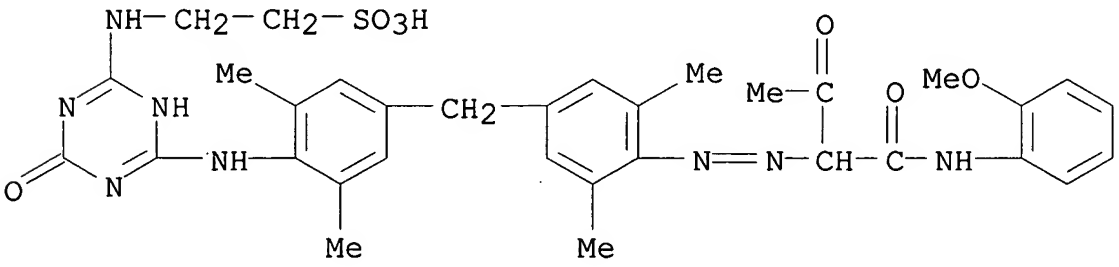
CN Butanamide, 2-[(4-chloro-2-nitrophenyl)azo]-N-(2-chlorophenyl)-3-oxo- (9CI) (CA INDEX NAME)



RN 150206-17-0 HCAPLUS
CN Butanamide, 2-[(2-methoxy-3-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)

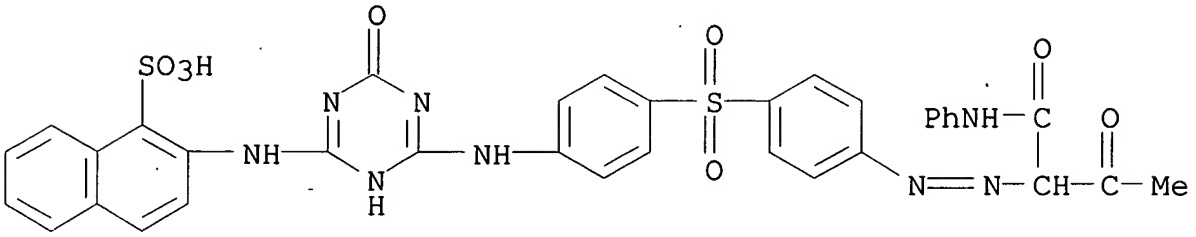


RN 596806-19-8 HCAPLUS
CN Ethanesulfonic acid, 2-[[1,4-dihydro-6-[[4-[[4-[[1-[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



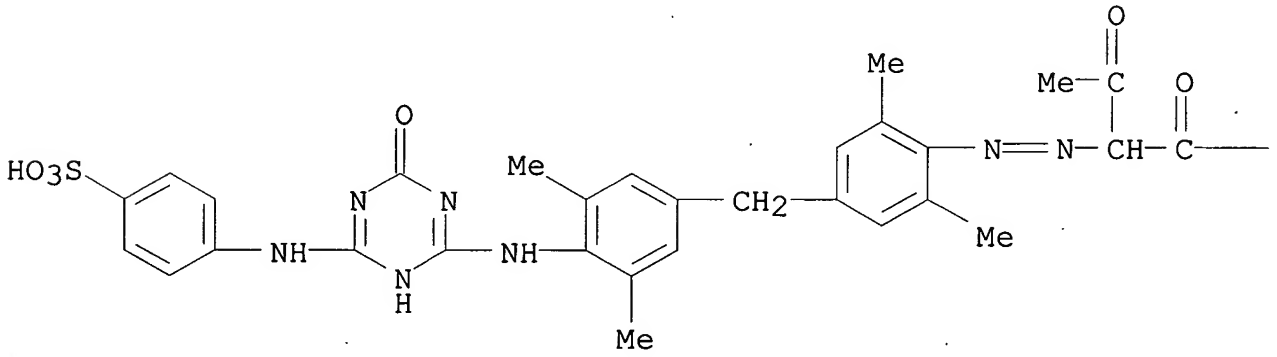
RN 596806-20-1 HCAPLUS
CN 1-Naphthalenesulfonic acid, 2-[[1,4-dihydro-4-oxo-6-[[4-[[4-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]phenyl]sulfonyl]phenyl]ami

no]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 596806-21-2 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[4-[[4-[[1-[[(2-chlorophenyl)amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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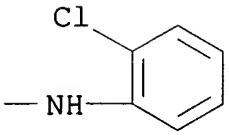


IC ICM C09D017-00
ICS B41M005-00; C09B029-33; C09B035-035; C09B067-22; C09D011-00; G03G009-09
CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 42, 74

IT **6486-23-3P 150206-17-0P 596806-19-8P 596806-20-1P 596806-21-2P**
(preparation of yellow azo pigment compns. for image recording applications)

L18 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:729868 HCAPLUS
DOCUMENT NUMBER: 123:259916
TITLE: Pigment dispersants
INVENTOR(S): Kitamura, Kunji; Miki, Toshuki; Saiki, Shunjiro; Saiki, Mutsuhiko
PATENT ASSIGNEE(S): Sanyo Color Works, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07126546	A2	19950516	JP 1993-310987	19931106
JP 3561846	B2	20040902		

PRIORITY APPLN. INFO.: JP 1993-310987 19931106

OTHER SOURCE(S): MARPAT 123:259916
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

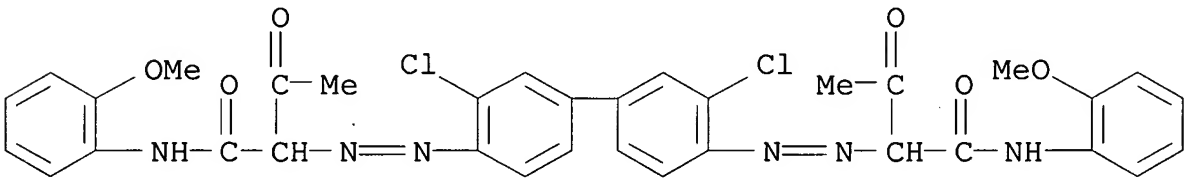
AB Title dispersants, useful for pigments in coatings and inks, comprise I [R = residue of azo coupler; R1, R2 = OH, NHYSO3H; Y = ethylene, (un)substituted phenylene, naphthylene; ≥1 of R1 and R2 being NHYSO3H; Q = H, halo, lower alkyl, lower alkoxy, OH; Z = CH2, O, S, SO2, CONH, O-p-C6H4-p-C6H4O, O-p-C6H4-SO2-p-C6H4, O-p-C6H4-C(CF3)2-p-C6H4O, O-p-C6H4O, O-m-C6H4O, CH:CH; m ≥0] and their metal salts, ammonium salts, and amine salts. A mixture of C.I. Pigment Yellow 83 9.0, II 1.0, urethane varnish

45.0, and thinner (toluene/iPrOH/MEK) 45.0 parts showed viscosity 113 cP at 60 rpm and gloss 87.2%.

IT **4531-49-1**, C.I. Pigment Yellow 17 **5468-75-7**, C.I. Pigment Yellow 14 **5567-15-7**, C.I. Pigment Yellow 83 **6358-31-2**, C.I. Pigment Yellow 74 **6358-85-6**, C.I. Pigment Yellow 12 **6505-28-8**, C.I. Pigment Orange 16 (pigment dispersants for coatings and inks)

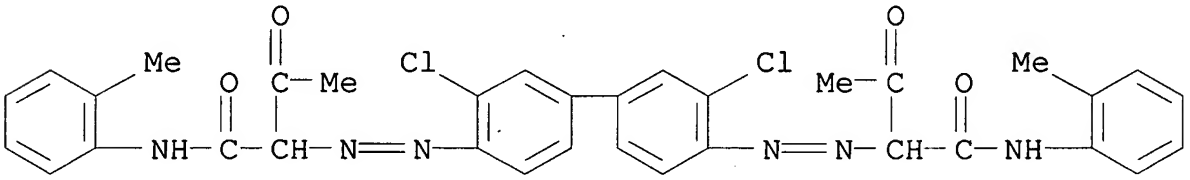
RN 4531-49-1 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



RN 5468-75-7 HCAPLUS

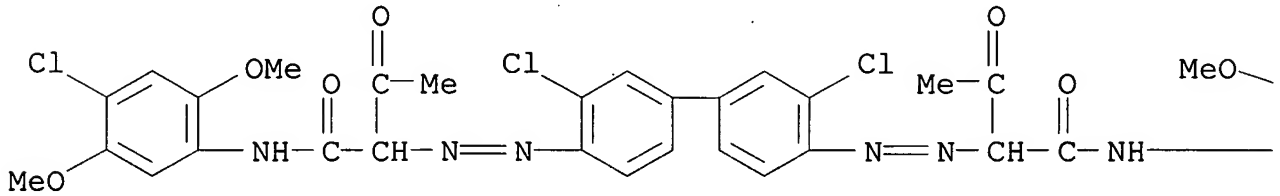
CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2-methylphenyl)-3-oxo- (9CI) (CA INDEX NAME)



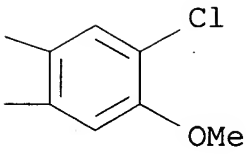
RN 5567-15-7 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(4-chloro-2,5-dimethoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)

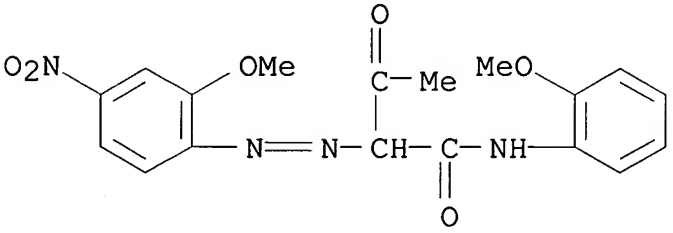
PAGE 1-A



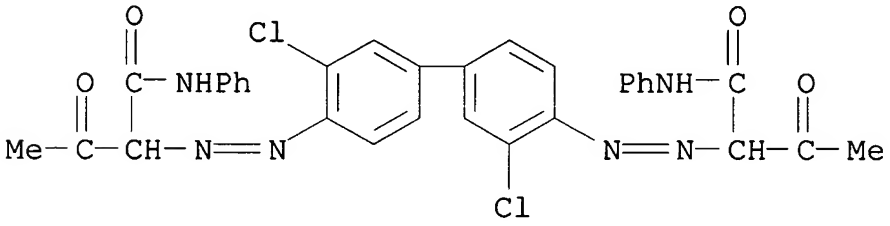
PAGE 1-B



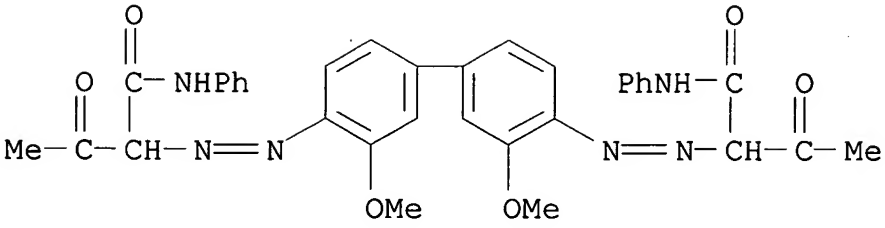
RN 6358-31-2 HCAPLUS
CN Butanamide, 2-[(2-methoxy-4-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



RN 6358-85-6 HCAPLUS
CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



RN 6505-28-8 HCAPLUS
CN Butanamide, 2,2'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[3-oxo-N-phenyl- (9CI) (CA INDEX NAME)

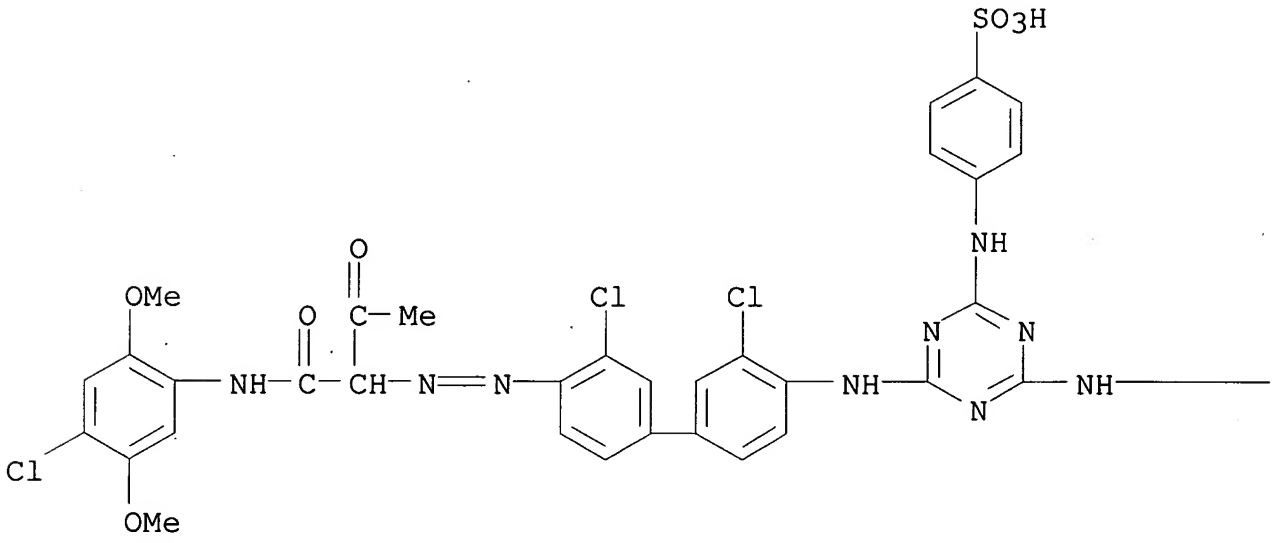


IT **169379-44-6P 169379-45-7P 169379-46-8P**
169379-47-9P 169379-48-0P 169379-49-1P
169379-50-4P 169379-51-5P 169379-54-8P
(pigment dispersants for coatings and inks)

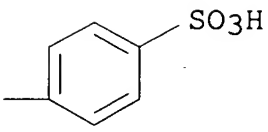
RN 169379-44-6 HCAPLUS

CN Benzenesulfonic acid, 4,4'-[[6-[[3,3'-dichloro-4'-[[1-[[(4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

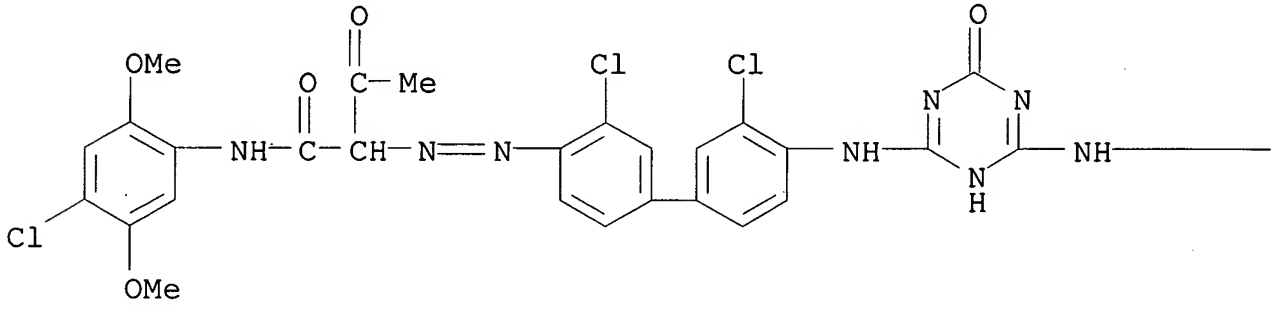


PAGE 1-B

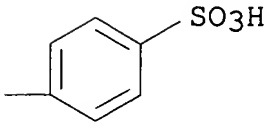


RN 169379-45-7 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[(4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



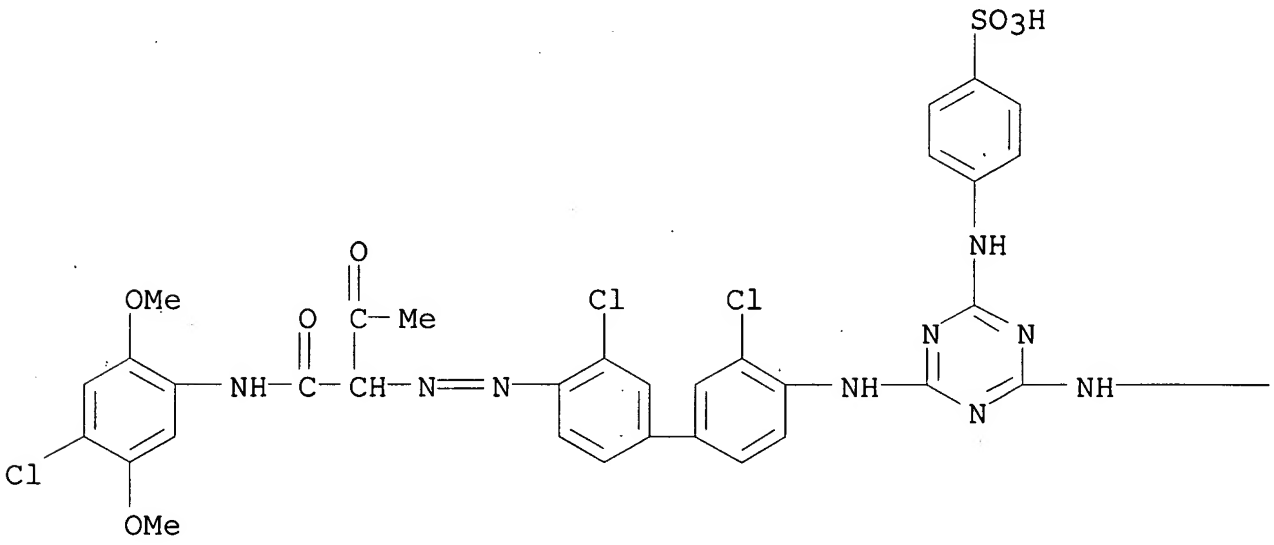
PAGE 1-B



RN 169379-46-8 HCAPLUS

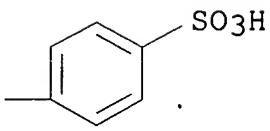
CN Benzenesulfonic acid, 4,4'-[[6-[[3,3'-dichloro-4'-[[1-[[(4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis-, barium salt (1:1) (9CI) (CA INDEX NAME)

PAGE 1-A



● Ba

PAGE 1-B



RN 169379-47-9 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[(4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]-, compd. with 1-octadecanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 169379-45-7
CMF C33 H27 Cl3 N8 O8 S

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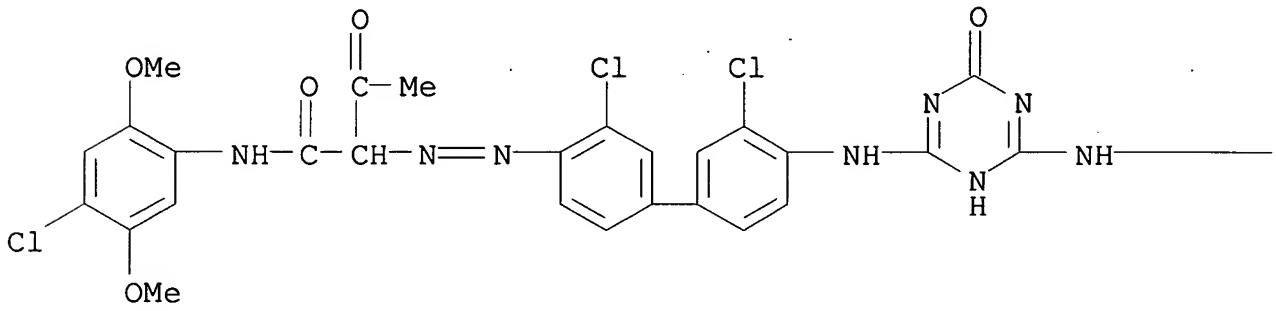
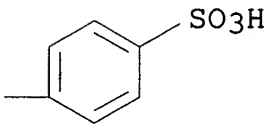


PAGE 1-B



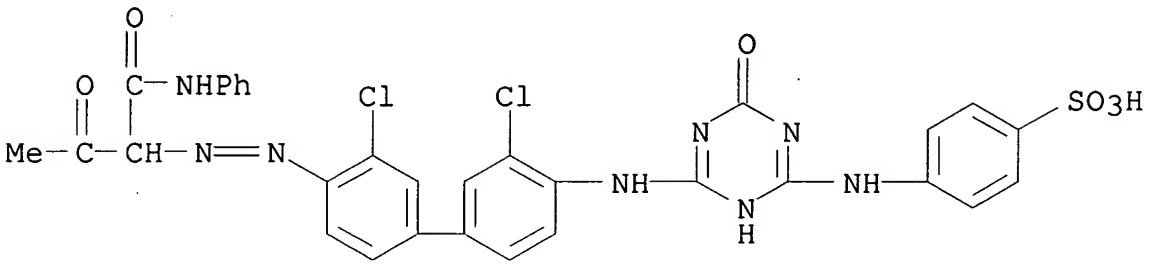
CM 2

CRN 124-30-1
CMF C18 H39 N

$H_2N-(CH_2)_{17}-Me$

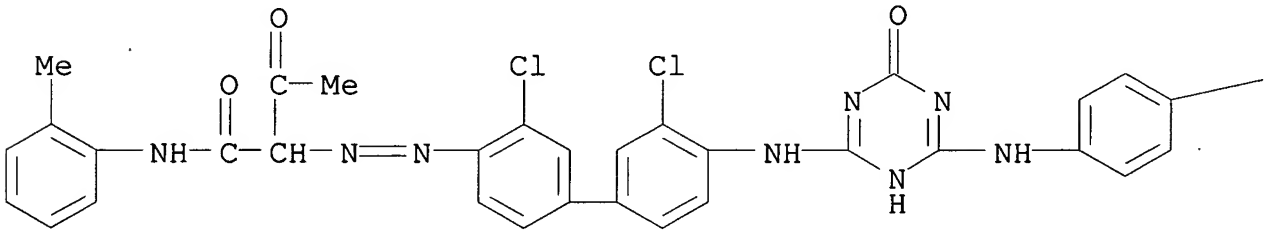
RN 169379-48-0 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-

dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 169379-49-1 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[(2-methylphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

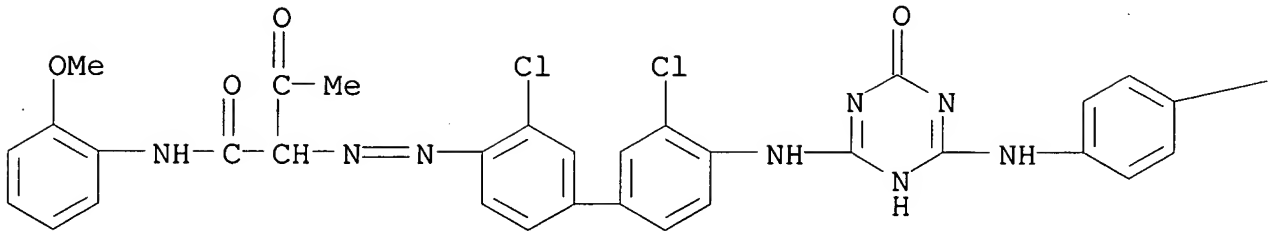


PAGE 1-B

— SO_3H

RN 169379-50-4 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

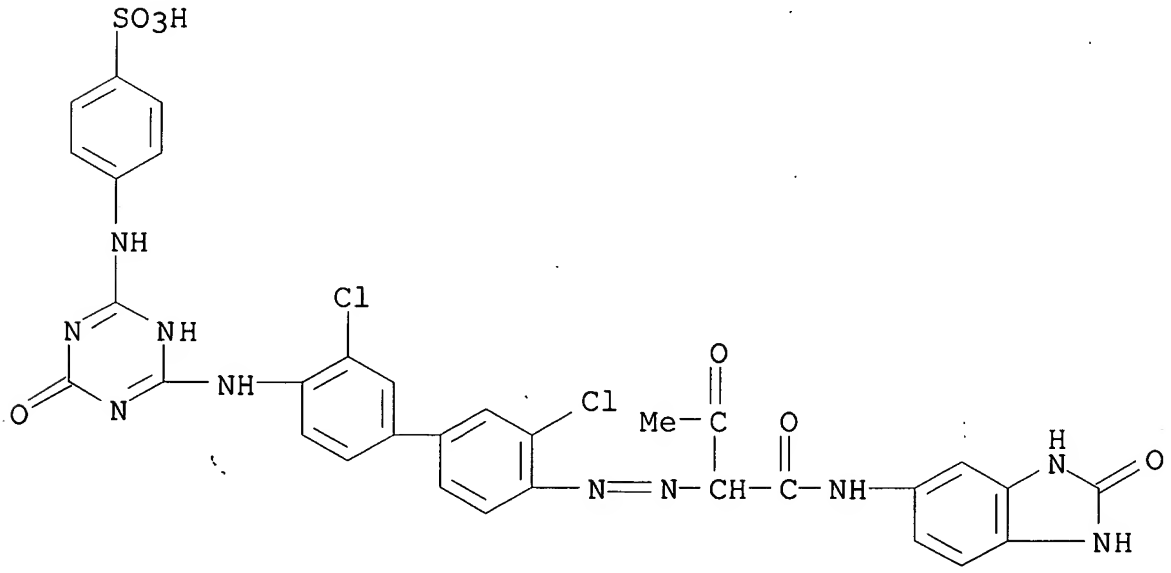
PAGE 1-A



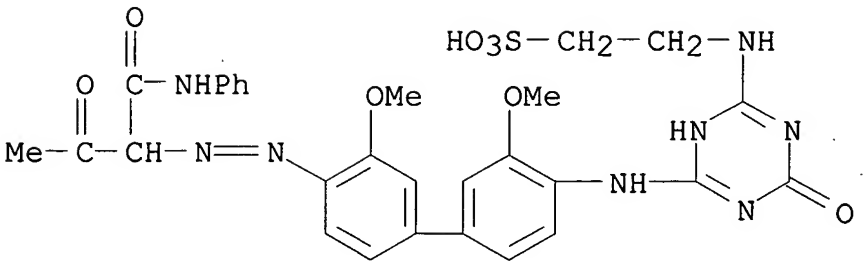
PAGE 1-B

— SO_3H

RN 169379-51-5 HCAPLUS
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[(2,3-dihydro-2-oxo-1H-benzimidazol-5-yl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 169379-54-8 HCAPLUS
CN Ethanesulfonic acid, 2-[[6-[[3,3'-dimethoxy-4'-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



IC ICM C09B067-20
CC 42-6 (Coatings, Inks, and Related Products)
Section cross-reference(s): 25, 41
IT 2425-85-6, C.I. Pigment Red 3 3520-72-7, C.I. Pigment Orange 13 **4531-49-1**, C.I. Pigment Yellow 17 5280-68-2, C.I. Pigment Red 146 **5468-75-7**, C.I. Pigment Yellow 14 **5567-15-7**, C.I. Pigment Yellow 83 **6358-31-2**, C.I. Pigment Yellow 74 **6358-85-6**, C.I. Pigment Yellow 12 6358-87-8, C.I. Pigment Red 38 6410-41-9, C.I. Pigment Red 5 **6505-28-8**, C.I. Pigment Orange 16 6883-91-6, C.I. Pigment Red 37 12225-18-2, C.I. Pigment Yellow 97 15793-73-4, C.I. Pigment Orange 34 31778-10-6, C.I. Pigment Red 208 31837-42-0, C.I. Pigment Yellow 151 36888-99-0, C.I. Pigment Yellow 139
(pigment dispersants for coatings and inks)
IT **169379-44-6P 169379-45-7P 169379-46-8P 169379-47-9P 169379-48-0P 169379-49-1P 169379-50-4P 169379-51-5P** 169379-52-6P 169379-53-7P **169379-54-8P** 169379-56-0P 169379-58-2P 169379-59-3P 169379-60-6P 169379-61-7P 169379-62-8P 169379-63-9P 169379-64-0P 169379-65-1P 169379-66-2P 169379-67-3P
(pigment dispersants for coatings and inks)

L18 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1969:440227 HCAPLUS
DOCUMENT NUMBER: 71:40227
TITLE: Direct phthalocyanine green dyes
INVENTOR(S): Chmatal, Vladimir; Allan, Zdenek J.; Horyna, Jaroslav; Panchartek, Josef; Virag, Oldrich
SOURCE: Czech., 3 pp.
CODEN: CZXXA9
DOCUMENT TYPE: Patent
LANGUAGE: Czech
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 121263		19661215	CS 1964 0505	

GI For diagram(s), see printed CA Issue.

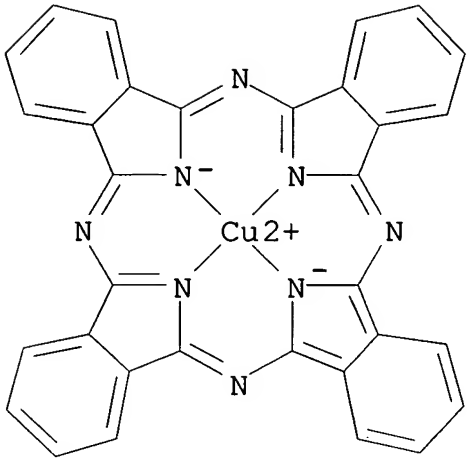
AB Brilliant green dyes of the general formula I (Pc is a Cu phthalocyanine residue) were prepared and have a good light and wash fastness on cellulose. Thus, 32.2 parts of the equimol. condensate from 2,4-(H2N)2C6H3SO3H and cyanuric chloride was heated to 40° with 50.6 parts 3,1,5-H2NC10H5-(SO3H)2 → 4-H2NC6H4NHCOCH2 COMe, cooled to 20°, treated with aqueous suspension of 94.9 parts Cu sulfophthalocyaninetris-(sulfonyl chloride), condensed with 9.2 parts benzidine, and heated for 1 hr. to 90-100° to give I [R = H, X = direct bond, Y = 1,5,3-(HO3S)2C10H5(Q)], a dark green powder soluble in H2O and concentrated H2SO4. Similarly were prepared green I (R, X, and Y given): H, NHCO, Q; SO3H, CH:CH, Q. Similarly prepared were the yellowish green I (R = H, X = direct bond) with Y being 4,3-MeO(HO3S)C6H3 or 4,3-Me(HO3S)C6H3.

IT **26427-99-6P 26428-01-3P 26777-95-7P**
(preparation of)

RN 26427-99-6 HCAPLUS

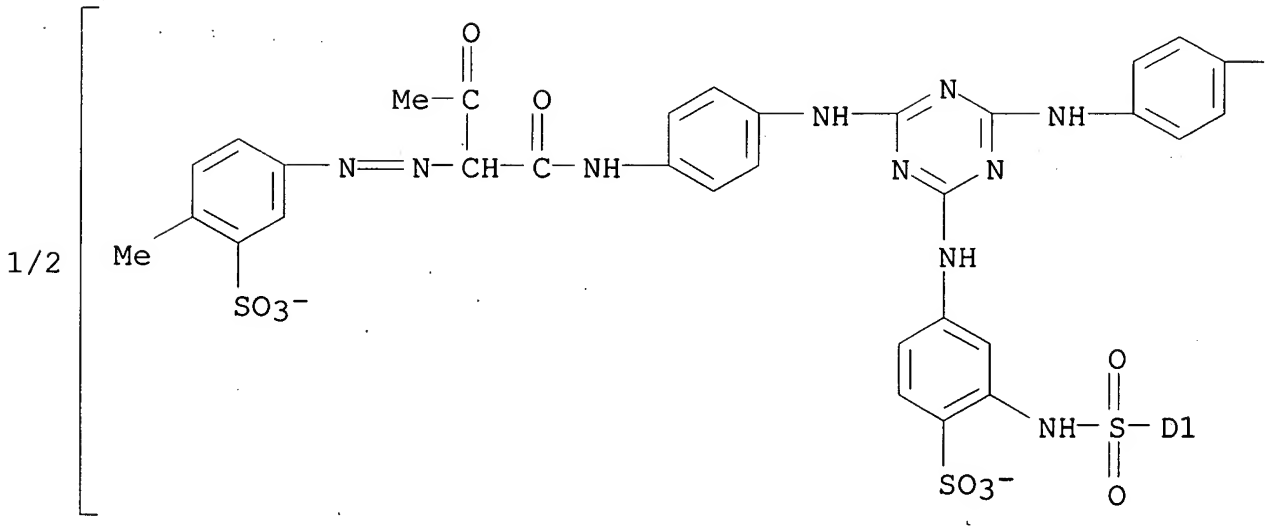
CN Copper, [μ-[[decahydrogen [4,4'-biphenylylenebis[imino[6-[p-[2-[(3-sulfo-p-tolyl)azo]acetoacetamido]anilino]-s-triazine-4,2-diyl]imino(6-sulfo-m-phenylene)iminosulfonyl]]diphthalocyaninetrisulfonato](4-)]]di- (8CI) (CA INDEX NAME)

PAGE 1-A



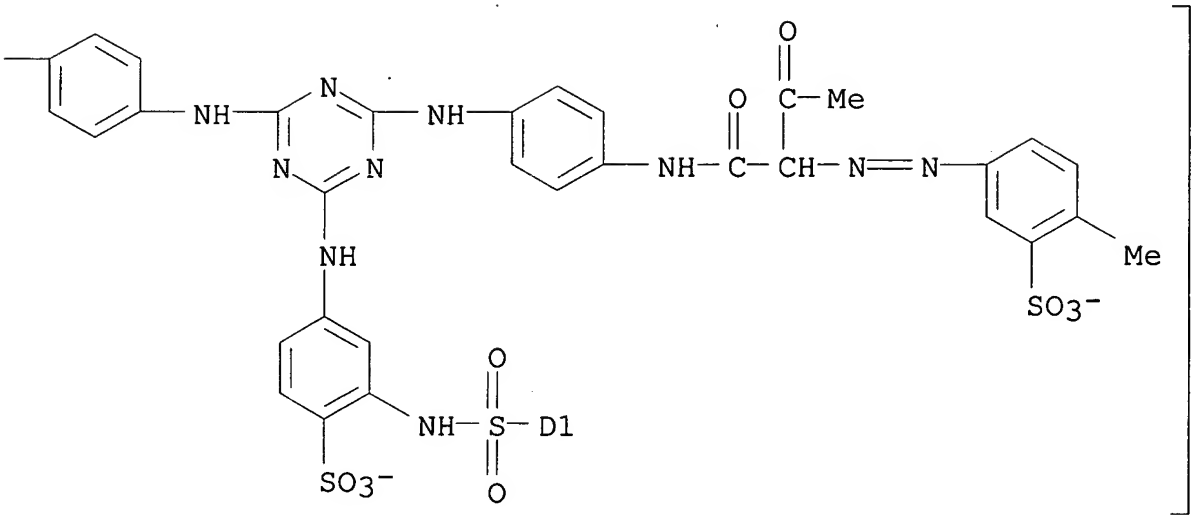
3 [D1—SO_3^-]

PAGE 2-A



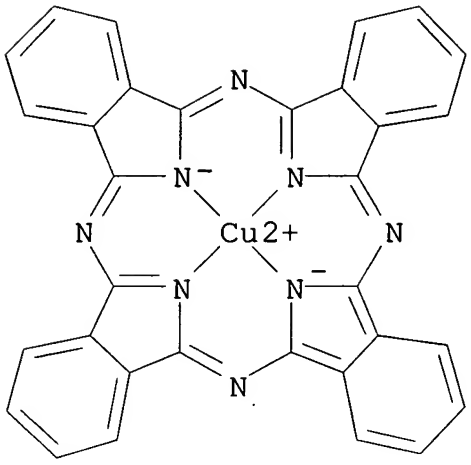
●10 H^+

PAGE 2-B



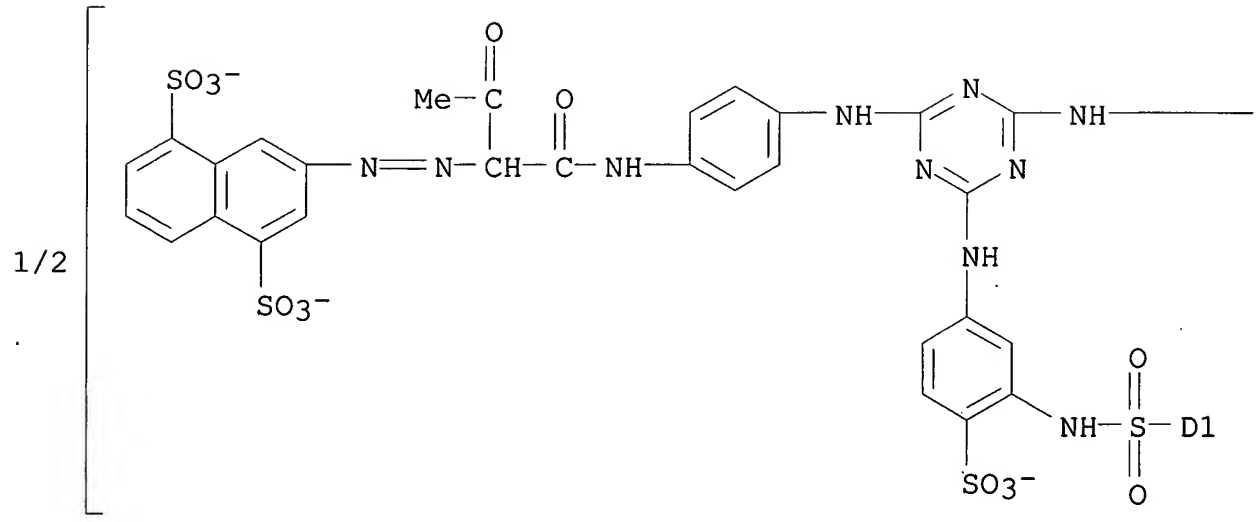
RN 26428-01-3 HCAPLUS
CN Copper, [μ-[[tetradecahydrogen [vinylenebis[(3-sulfo-p-phenylene)imino[6-[p-[2-[(4,8-disulfo-2-naphthyl)azo]acetoacetamido]anilino]-s-triazine-4,2-diyl]imino(6-sulfo-m-phenylene)iminosulfonyl]]diphthalocyaninetrisulfonato](4-)]]di- (8CI) (CA INDEX NAME)

PAGE 1-A



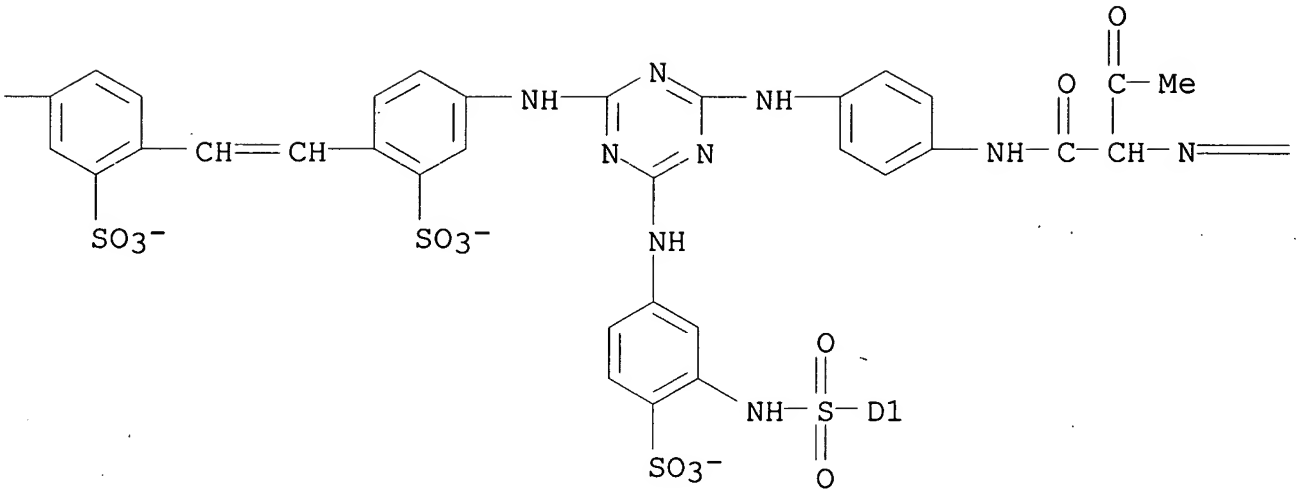
$$3\left[\ D1-SO_3^-\ \right]$$

PAGE 2-A

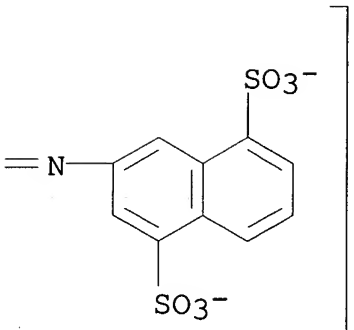


●14 H^+

PAGE 2-B

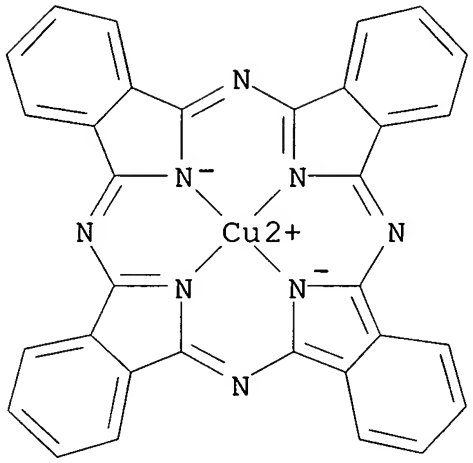


PAGE 2-C



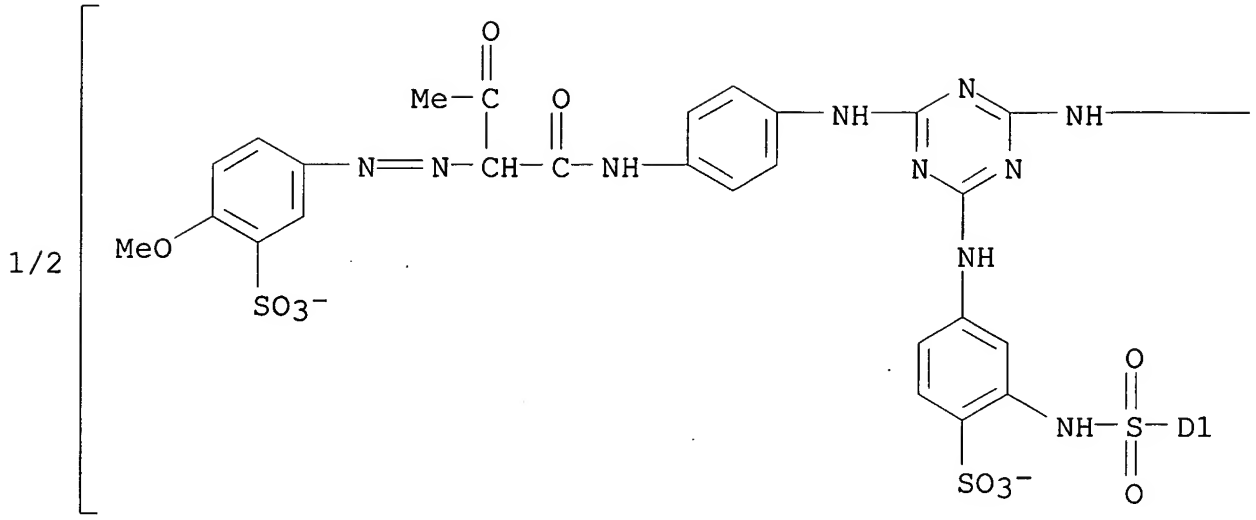
RN 26777-95-7 HCAPLUS
CN Copper, [μ-[[decahydrogen [4,4'-biphenylylenebis[imino[6-[p-[2-[(4-methoxy-3-sulfophenyl)azo]acetoacetamido]anilino]-s-triazine-4,2-diyl]imino(6-sulfo-m-phenylene)iminosulfonyl]]diphthalocyanine trisulfonato](4-)]]di- (8CI) (CA INDEX NAME)

PAGE 1-A



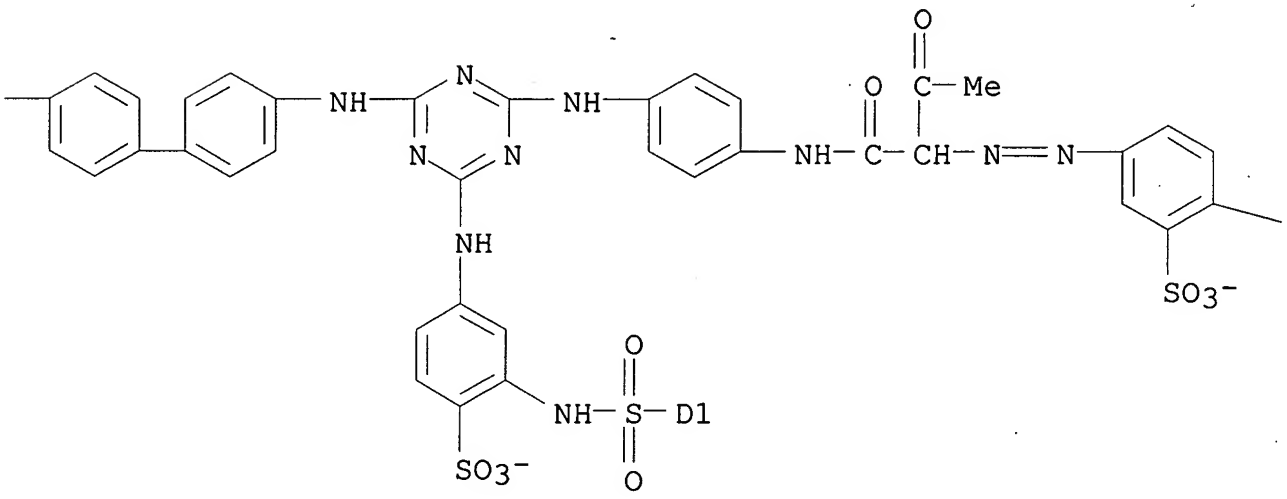
$$3\left[\ D1\text{—}SO_3^-\ \right]$$

PAGE 2-A

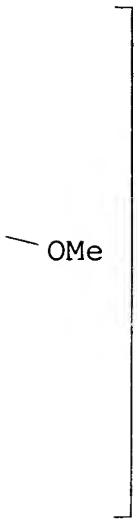


●10 H^+

PAGE 2-B



PAGE 2-C



IC C09B
CC 40 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)
IT **26427-99-6P** 26428-00-2P **26428-01-3P**
26777-95-7P 27014-99-9P
(preparation of)